

Applicant : Surya Kumar Kovvali et al.
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Attorney's Docket No.: 10939-002001

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-17. (cancelled)

18. (currently amended) A method for communicating between a plurality of nodes of a communication system in which a series of fixed-length frames pass between the nodes of the system comprising:

provisioning the communication system, including allocating in each frame a fixed part, said fixed part including a first part of the frame for passing control information between the nodes ~~[and]~~, a second part for passing data streams over a plurality of dynamically allocated channels between the nodes, and a third part that is allocated for fixed-rate channels between the nodes;

at a first node in the system,

- (1) receiving a communication request for a dynamically allocated channel between a second node and a third node including receiving request data from the second node in the first part of a received frame,
- (2) allocating a portion of the second part of the frames to said dynamically allocated channel, and
- (3) broadcasting a response to the request including transmitting control data in the first part of a frame; and

at the second node,

- (1) receiving the control data transmitted by the first node,
- (2) determining the portion of the second part of each of the frames that is allocated to said dynamically allocated channel, and

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(3) sending a data stream over said dynamically allocated channel to the third node, including passing data in said portion of the second part of each of a series of frames.

19. (previously presented) The method of claim 18 wherein receiving the request for the dynamically allocated channel between the second node and the third node includes receiving a request to change an allocated capacity of a communication channel.

20. (currently amended) The method of claim 18 wherein receiving the request [~~to assign the communication session~~] for the dynamically allocated channel includes receiving a priority for said [~~communication session~~] channel.

21. (previously presented) The method of claim 19 wherein allocating the portion of the second part of the frames to said communication channel includes modifying allocated capacities of multiple communication channels.

22. (previously presented) The method of claim 18 wherein the communication system includes a synchronous communication network and each frame includes a fixed length payload, and wherein allocating the fixed part of each frame includes allocating a portion of the fixed length payload of each frame.

23. (previously presented) The method of claim 22 wherein the synchronous communication network includes a SONET/SDH network, and a Synchronous Payload Envelope (SPE) of each frame comprises the fixed length payload.

24. (previously presented) The method of claim 23 wherein the portion of the fixed length payload comprises the entire SPE.

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25. (previously presented) The method of claim 23 wherein the portion of the fixed length payload includes a virtual tributary group.
26. (previously presented) The method of claim 23 wherein provisioning the communication system further includes allocating a portion of the SPE to conventional SONET/SDH virtual tributaries, whereby a portion of the communication capacity of the SONET/SDH network is used for conventional communication on statically allocated virtual paths.
27. (previously presented) The method of claim 23 wherein the portion of the SPE includes a virtual tributary.
28. (previously presented) The method of claim 18 wherein the first part of each frame is for passing control information that includes requests for dynamically allocated channels from a plurality nodes of the system.
29. (previously presented) The method of claim 18 wherein the control data that is broadcast in the first part of each frame is for passing data specifying portions of each frame associated with each of a plurality of dynamically allocation channels.
30. (previously presented) The method of claim 29 wherein data specifying portions of each frame includes offset data of said portions within the frame.
31. (previously presented) The method of claim 30 wherein data specifying portions of each frame includes sizes of the data of said portions within the frame.

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32. (previously presented) The method of claim 29 wherein sending the data stream over the dynamically allocated channel from the second node to the third node includes accessing the data specifying the portion of the frame associated with said dynamic channel.
33. (currently amended) The method of claim 32 wherein sending the data stream includes adding data to the frame according to the ~~[accessed]~~ data specifying the portion of the frame associated with the dynamic channel.
34. (previously presented) The method of claim 18 wherein receiving the request for the dynamically allocated channel between the second node and the third node includes receiving a request to assign a communication session for passing a data stream between the second node and the third node.
35. (currently amended) The method of claim 34 further comprising receiving ~~[the]~~ a request for altering ~~[the]~~ a capacity of a dynamically allocated channel between the second node and the third node, said request being sent from the second node and received at the third node.
36. (previously presented) The method of claim 35 further comprising, at the third node, modifying the request and forwarding the modified request to the first node.
37. (previously presented) The method of claim 36 wherein modifying the request is performed according to communication capacity required for communication from the third node to the second node.
38. (cancelled)

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39. (currently amended) The method of claim ~~[38]~~ 18 wherein ~~[the location of]~~ the third part in the fixed part remains at a constant location in the fixed part independent of locations of dynamically allocated channels.

40. (currently amended) The method of claim ~~[38]~~ 18 wherein the third part includes a plurality of separated portions within the fixed part.

41. (previously presented) The method of claim 18 wherein the first part of the frame and the second part of the frame are each integral numbers of columns of an SPE.

42. (previously presented) The method of claim 41 wherein allocating a portion of the second part of the frames includes allocating an integral number of nine-byte columns of an SPE.

43-48. (cancelled)